

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**APPARATUS AND METHOD FOR PROTECTING CRITICAL RESOURCES AGAINST SOFT ERRORS IN
HIGH PERFORMANCE MICROPROCESSORS**

the specification of which is attached hereto unless the following is entered:

was filed on	as United States Application Number or PCT International Application Number	and was amended on (if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56.

PRIOR FOREIGN APPLICATION(S)

I hereby claim foreign priority benefits under 35 USC §119(a-d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below any foreign application(s) for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed:

Application Number	Country	Filing Date (day/month/year)	Priority Not Claimed

PROVISIONAL APPLICATION(S)

I hereby claim the benefit under 35 USC §119(e) of any United States provisional application(s) listed below:

Application Number	Filing Date

PRIOR UNITED STATES APPLICATION(S)

I hereby claim the benefit under 35 USC §120 of any United States application(s), or §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 USC §112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

Application Number	Filing Date	Status (patented, pending, abandoned)

POWER OF ATTORNEY

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

John C. Altmiller (Reg. No. 25,951); Shawn W. O'Dowd (Reg. No. 34,687); David R. Schaffer (Reg. No. 43,089) of KENYON & KENYON with offices located at 1500 "K" Street NW, Suite 700, Washington, DC, 20005-1257, telephone (202) 220-4200, and at 333 W. San Carlos Street, Suite 600, San Jose, CA, 95110-2711, telephone (408) 975-7500;

and Alan K. Aldous (#31,905); R. Edward Brake (#37,784); Ben Burge (#42,372); Jeffrey S. Draeger (#41,000); Cynthia Thomas Faatz (#39,973); John N. Greaves (#40,362); Seth Z. Kalson (#40,670); David J. Kaplan (#41,105); Peter Lam (#44,855); Charles A. Mirho (#41,199); Leo V. Novakoski (#37,198); Thomas C. Reynolds (#32,488); Kenneth M. Seddon (#43,105); Mark Seeley (#32,299); Steven P. Skabrat (#36,279); Howard A. Skaist (#36,008); Gene I. Su (#45,140); Calvin E. Wells (#43,256); Raymond J. Werner (#34,752); Robert G. Winkle (#37,474); and Charles K. Young (#39,435) of INTEL CORPORATION.

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION (Cont.)

Direct telephone calls to: DAVID R. SCHAFER (202) 220-4323		Send correspondence to: KENYON & KENYON 333 W. San Carlos, Street, Suite 600 San Jose, CA 95110-2711	
I hereby declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issuing thereon.			
Full name of first or sole inventor	Last Name QUACH	First Name NHON	Middle Name T.
Residence	City Santa Clara	State or Country CA	Country of Citizenship USA
Post Office Address	Street 6522 Pfeiffer Ranch Road	City Santa Clara	State or Country & Zip Code CA 95070
Signature <i>Nhon Quach</i>		Date 11/14/00	
Full name of second inventor	Last Name CRAWFORD	First Name John	Middle Name H.
Residence	City Sunnyvale <i>Saratoga</i>	State or Country CA	Country of Citizenship USA
Post Office Address	Street 20128 Chateau Drive	City Sunnyvale <i>Saratoga</i>	State or Country & Zip Code CA 95070
Signature <i>John Crawford</i>		Date 11/17/2000	
Full name of third inventor	Last Name KOSARAJU	First Name Chakravarthy	Middle Name
Residence	City Sunnyvale	State or Country CA	Country of Citizenship INDIA
Post Office Address	Street 1083 Rembrandt Drive	City Sunnyvale	State or Country & Zip Code CA 94087
Signature		Date	
Full name of fourth inventor	Last Name NAGAPUDI	First Name Venkatesh	Middle Name
Residence	City Santa Clara	State or Country CA	Country of Citizenship INDIA
Post Office Address	Street 2250 Monroe Street, Apt. 247	City Santa Clara	State or Country & Zip Code CA 95050
Signature <i>Venkatesh</i>		Date 12/06/2000	

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Residence	City Sunnyvale	State or Country CA	Country of Citizenship USA
Post Office Address	Street 20128 Chateau Drive	City Sunnyvale	State or Country & Zip Code CA 95070
Signature		Date	
<i>Full name of third inventor</i>	Last Name KOSARAJU	First Name Chakravarthy	Middle Name
Residence	City Sunnyvale	State or Country CA	Country of Citizenship INDIA
Post Office Address	Street 1083 Rembrandt Drive	City Sunnyvale	State or Country & Zip Code CA 94087
Signature <i>K. S. Chakravarthy</i>		Date <i>12/15/00</i>	
<i>Full name of fourth inventor</i>	Last Name NAGAPUDI	First Name Venkatesh	Middle Name
Residence	City Santa Clara	State or Country CA	Country of Citizenship INDIA
Post Office Address	Street 2250 Monroe Street, Apt. 247	City Santa Clara	State or Country & Zip Code CA 95050
Signature		Date	



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MARCH 13, 2001

PTAS



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KENYON & KENYON
DAVID R. SCHAFER
1500 K STREET, N.W.
SUITE 700
WASHINGTON, DC. 20005

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/28/2000

REEL/FRAME: 011386/0857
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

QUACH, NHON T.

DOC DATE: 11/14/2000

ASSIGNOR:

CRAWFORD, JOHN H.

DOC DATE: 11/17/2000

ASSIGNOR:

KOSARAJU, CHAKRAVARTHY

DOC DATE: 12/15/2000

ASSIGNOR:

NAGAPUDI, VENKATESH

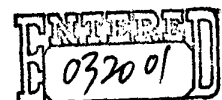
DOC DATE: 12/06/2000

ASSIGNEE:

INTEL CORPORATION
2200 MISSION COLLEGE BOULEVARD
P.O. BOX 58119
SANTA CLARA, CALIFORNIA 95052-8119

SERIAL NUMBER: 09608959
PATENT NUMBER:

FILING DATE: 06/30/2000
ISSUE DATE:



011386/0857 PAGE 2

SEDLEY PYNE, PARALEGAL
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS



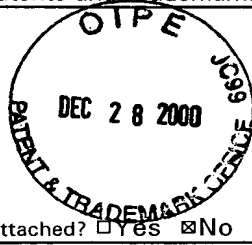
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OVER SHEET
ONLY

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office
2207/8687

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
Nhon T. Quach
John H. Crawford
Chakravarthy Kosaraju
Venkatesh Nagapudi



2. Name and address of receiving party(ies):

Name: Intel Corporation
Internal Address: 2200 Mission College Boulevard
Street Address: P.O. Box 58119
Santa Clara, CA 95052-8119

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other _____

Additional name(s) & address(es) attached? ☐ Yes ☒ No

Execution Dates: November 14, 2000; November 17, 2000; December 6, 2000 and December 15, 2000

4. Application number(s) or patent number(s);

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s) 09/608,959

B. Patent No.(s)

Additional numbers attached: ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:



23838
PATENT TRADEMARK OFFICE

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$40.00

☐ Enclosed

☒ Authorized to be charged to deposit account

8. Deposit account number:

11-0600

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

David R. Schaffer (Reg. No. 43,089)
2000

Name of Person Signing

Signature

December 28

Date

Total number of pages comprising cover sheet: 3

ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we the undersigned, hereby sell, assign, and transfer to Intel Corporation, a corporation of Delaware, having a principal place of business at 2200 Mission College Blvd., P.O. Box 58119, Santa Clara, California 95052-8119, ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all improvements that are disclosed in the application for the United States patent entitled **APPARATUS AND METHOD FOR PROTECTING CRITICAL RESOURCES AGAINST SOFT ERRORS IN HIGH PERFORMANCE MICROPROCESSORS** and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Each Inventor: Please Sign and Date Below:

<u>11/14/</u> , 2000 Date	<u>Nhon Quach</u> NHON T. QUACH
<u>11/17</u> , 2000 Date	<u>John H. Crawford</u> JOHN H. CRAWFORD
<u> </u> , 2000 Date	<u>CHAKRAVARTHY KOSARAJU</u>
<u>12/6</u> , 2000 Date	<u>Venkatesh</u> VENKATESH NAGAPUDI

Each Inventor: Please also list the date that you signed the accompanying DECLARATION AND POWER OF ATTORNEY:

<u> </u> , 2000 Date
<u>11/17</u> , 2000 Date
<u> </u> , 2000 Date
<u> </u> , 2000 Date

Assignment Document Return Address:
KENYON & KENYON
1500 K Street, N.W.
Washington, D.C. 20005
(202) 220-4200

ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we the undersigned, hereby sell, assign, and transfer to Intel Corporation, a corporation of Delaware, having a principal place of business at 2200 Mission College Blvd., P.O. Box 58119, Santa Clara, California 95052-8119, ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all improvements that are disclosed in the application for the United States patent entitled **APPARATUS AND METHOD FOR PROTECTING CRITICAL RESOURCES AGAINST SOFT ERRORS IN HIGH PERFORMANCE MICROPROCESSORS** and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

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_____, 2000 Date	_____ NHON T. QUACH
_____, 2000 Date	_____ JOHN H. CRAWFORD
<u>12/15</u> , 2000 Date	<u><i>K. S. Chakravarthy</i></u> CHAKRAVARTHY KOSARAJU
_____, 2000 Date	_____ VENKATESH NAGAPUDI

Each Inventor: Please also list the date that you signed the accompanying DECLARATION AND POWER OF ATTORNEY:

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